

Democratising energy is necessary for Africans to move into the digital age

Without technological constraints, more people from across Africa are free to innovate and create on the global stage; democratisation of energy is necessary to enable Africans to move into the digital age.



The term Democratisation of Technology has become synonymous with the digital age. In a nutshell, it means that access to advanced technology is no longer the domain of a privileged few, but that more and more people are benefitting from access to smart technologies which is rapidly levelling the playing field of global innovation.

One of the deciding factors in who has access to this technology, is the distribution of energy. In order to ensure the equality of technology we first need to solve the problem of unreliable energy.

The concept that energy must come from one central source is inefficient and outdated. By decentralising energy and allowing people to generate and use energy as needed, you're allowing people to take charge of their own prosperity. In a continent like Africa, with the incredible opportunity for solar and wind generated energy, keeping energy centralised severely hampers the potential for economic growth.

Microgrids are an effective way to quickly and effectively diversify a centralised energy grid. By employing microgrids you not only take the strain off the central grid and lower your carbon footprint, you also create economic opportunities where people can sell off excess energy produced.

Enabling democratisation of technology

Through energy comes wider access to communication and the ability to participate in global conversations through online connectivity. This in turn nurtures creativity, innovation and economic growth.

Traditionally, the journey from 'idea' to 'successful product or business' is a complicated process involving business cases, pitches for funding to build a prototype, raising capital investment for production and testing, wading through patent approvals and trademark law. While many of these steps are still crucial once you have a working prototype, the democratisation of technology makes it easier for inventors and entrepreneurs to develop their ideas. SME's are vital economic drivers and making it easier for them to compete will benefit the economy as a whole.

Digital twinning is one example that streamlines the production process. A digital twin is a virtual representation of a physical product or process, used to understand and predict the physical counterpart's performance characteristics. Digital twins are used throughout the product lifecycle to simulate, predict, and optimise the product and production system before investing in physical prototypes and assets.

This means innovators can test their products in the virtual world and refine it before ever needing to raise money for testing. Real-life testing is still vital with most products, but with digital twinning you can get your product as close to perfect in the virtual world in order to save time and costs when it comes to the final real-life test phase. In many ways this agility levels the playing field giving small, developing companies (and countries) the same opportunities as their bigger and more established counterparts.

For more, visit: https://www.bizcommunity.com